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(71)Applicant : IG TECH RES INC

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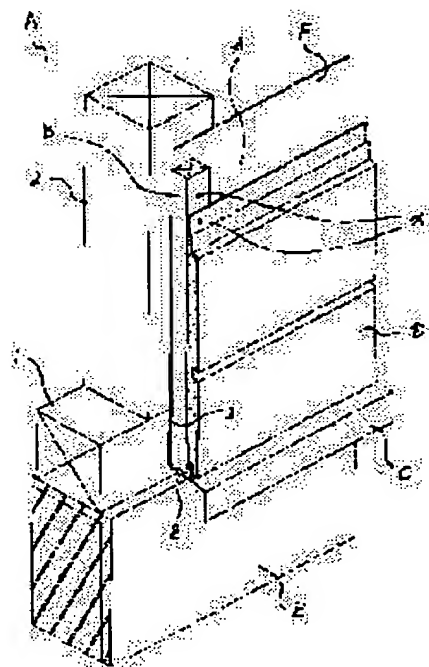
(72)Inventor : ISHIKAWA TAKASHI

(54) EXTERNAL WALL STRUCTURE OF SILL PART

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an external wall structure to form the external wall in which a concrete body in a new construction or a repair work is used as a substrate and a ventilation work and an insecticide function are added thereto.

SOLUTION: The clearance β between a sill 1 and a dry external wall material D formed by the thickness of vertical furring strips B is covered with the insertion groove of a water dripping material C at the sill part 1. And a plurality of pierced holes 8 are formed in the insertion groove. In this way, noxious insects and small animals can be prevented from entering into the inside of wall without hindrance of the air stream (ventilation structure, air cycle). And further, since the water-dripping material C is a molding, it can be easily fitted.



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CLAIMS

[Claim(s)]

[Claim 1] In the outer wall structure of the foundation section where a vertical furring strip is mostly fixed to a perpendicular corresponding to a main pillar and a stud, and the dry type outer wall material of male-and-female connection structure is being fixed to this vertical furring strip. The piece of a ridge which the soffit of a perpendicular fixed piece and this fixed piece was inclined [piece] in the method of outside, and made the abbreviation cross section project. While forming the piece of a start which made the middle of this piece of a ridge project up, and the piece of makeup which made the nose of cam of the aforementioned piece of a ridge hang below and forming a KO character-like insertion slot by the aforementioned fixed piece and the piece of a start. While having the ridge material of the shape of a long picture of having formed two or more breakthroughs into this insertion slot, carrying out arrangement fixation of the fixed piece of ridge material in accordance with a foundation and inserting the soffit section of a vertical furring strip in the insertion slot of ridge material. Outer wall structure of the foundation section characterized by for the female connection section of dry type outer wall material fitting into the piece of a start of ridge material, and forming the outer wall.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] this invention makes a ground the main part in new building or repair, and relates to the outer wall structure of the foundation section for forming the outer wall which added aeration structure and the insect control function to this.

[0002]

[Description of the Prior Art] Conventionally, the outer wall formed in aeration structure using dry type outer wall material was the structure which only merely fixed outer wall material on the vertical furring strip which laid the tarpaulin of permeability on the main part which consists of a main pillar, a stud, etc. on the whole surface, and was arranged on this tarpaulin or the tarpaulin. Furthermore, also in the conventional repair wall which forms a new wall on the existing wall, it was the structure which arranged the vertical furring strip on the existing wall like the time of new building, and only merely fixed outer wall material on this vertical furring strip.

[0003]

[Problem(s) to be Solved by the Invention] However, with this kind of structure, while the opening by the thickness of a vertical furring strip is formed between a main part or the existing outer wall, and dry type outer wall material Opening of this opening will be formed in the soffit portion (foundation portion) of dry type outer wall material. A bee, a termite, a cockroach, a vermin like a moth, and mites, such as a rat, trespassed upon the interior of a wall from this opening, the injury was done and spread on a main part or outer wall material, living conditions got worse, and it was not desirable for reasons of sanitation.

[0004]

[Means for Solving the Problem] While this invention covers with the insertion slot of ridge material the opening between the foundations and dry type outer wall material which are formed of the thickness of a vertical furring strip in a foundation portion in view of such a trouble By preparing two or more ***** in an insertion slot, without checking the flow (aeration structure, air cycle) of air, a vermin and the invasion of a mite can be prevented to Kabeuchi, and moreover, since ridge material is a moldings, it proposes the outer wall structure of the foundation section which attachment construction can perform easily.

[0005]

[Example] A drawing is used for below and the outer wall structure of the foundation section is explained to it in detail at this invention. The perspective diagram and drawing 2 drawing 1 explains the above-mentioned structure to be are a cross section, and, for a vertical furring strip and C, ridge material and D are [A / a main part and B / the foundation and F of dry type outer wall material and E] porous-waterproofing sheets in drawing.

[0006] If it is newly built structure, a main part A is a common object which consists of a stud (not shown) arranged perpendicularly for example, between the foundation 1 arranged horizontally on Foundation E, the main pillar 2 arranged perpendicularly on a foundation 1, and each main pillar 2, as shown in drawing. Of course, these which showed in drawing illustrate the case where a main part A consists of a wooden ground, and it consists of H beam material, square shape steel materials or lip ditch-type steel materials, etc. in the case of the building

which consists of a steel frame ground. Moreover, although not illustrated, you may form heat insulators (glass wool, rock wool, a synthetic-resin foam, foaming-in-place synthetic-resin foam, etc.) in the space surrounded with wall material, the main pillar 2, the stud, and the porous-waterproofing sheet F. In this case, it forms in all space, or it leaves space and forms in an indoor or outdoors side.

[0007] The vertical furring strip B carries out [perpendicularly] arrangement fixation through the porous-waterproofing sheet F by the fasteners alpha, such as a nail, from foundation 1 portion to a **** portion while arranging it on the fixed piece 3 of the ridge material C which carries out the postscript of the soffit section corresponding to a main pillar [which was arranged perpendicularly] 2 and stud top. With the thickness, the vertical furring strip B makes Opening beta form between a main part A and the porous-waterproofing sheet F, and the dry type outer wall material E, and functions as a distribution channel of air while it functions as an attaching member of the dry type outer wall material D which mainly carries out a postscript.

[0008] Installation of the vertical furring strip B especially in foundation 1 portion is carried out to the position where the soffit of the vertical furring strip B exists to the maximum back of the insertion slot 7 of the ridge material C arranged by the foundation 1, as shown in drawing.

[0009] Moreover, as generally shown in drawing, the porous-waterproofing sheet F is laid between a main part A and the vertical furring strip B. The porous-waterproofing sheet F consists of porous-waterproofing paper besides waterproof papers, such as asphalt felt, etc., prevents receipts and payments of moisture, performs prevention of dew condensation, and regulation (indoor moisture is emitted to the outdoors) of moisture, and has the work which protects a main part A.

[0010] The ridge material C For example, the piece 4 of a ridge which the soffit of the perpendicular fixed piece 3 and the fixed piece 3 was inclined [piece] in the method of outside, and made the abbreviation cross section project as shown in drawing 3 , While forming the piece 5 of a start which made the middle of the piece 4 of a ridge project up, and the piece 6 of makeup which made the nose of cam of the piece 4 of a ridge hang below and forming the KO character-like insertion slot 7 by the fixed piece 3 and the piece 5 of a start It consists of a long picture-like object which formed two or more breakthroughs 8 in the inner (piece 4 of a ridge) of the insertion slot 7.

[0011] Moreover, the ridge material C fixes [with a foundation 1] the fixed piece 3 to a foundation 1 through the fasteners alpha, such as a nail, continuously horizontally in parallel, as shown in drawing 1 and drawing 2 . Furthermore, the ridge material C functions as a guide which arranges the vertical furring strip B as a guide of arrangement of the dry type outer wall material D which carries out a postscript, the storm sewage which flows and falls the front face of the dry type outer wall material D is dropped with a sufficient water break on the ground, and it is made for storm sewage not to infiltrate into the interior of a wall from an outer wall soffit.

[0012] As a material of the ridge material C, furthermore, a sheet metal, for example, iron, aluminum, Copper, stainless steel, titanium, aluminum and a zinc-alloy galvanized steel sheet, a gal barium steel plate, A hoe low steel plate, a clad plate, lamination steel plates (vinyl chlorid steel plate etc.), a sandwiches steel plate (laminated damping steel sheet etc.), Kinds (of cours , the color board which painted these to various color tones is included), such as vinyl chloride resin and polycarbonate resin, and roll forming, Extrusion molding, press forming, autoclave-curing fabrication, etc. carry out the thing fabricated in the predetermined configuration by press forming, extrusion molding, etc., or minerals material.

[0013] Moreover, when it explains in full detail further using drawing 2 about the ridge material C, the fixed piece 3 is a portion which fixes the ridge material C to a foundation 1 through Fastener alpha. The piece 5 of a start prevents an adverse current so that the storm sewage which has flowed and fallen the front face of the dry type outer wall material D may not permeate in the foundation 1 direction while functioning as start [a guide-cum-] material [begin] to which it is the portion which fits in and the dry type outer wall material D stretches the female connection section 11 of the dry type outer wall material D which carries out a postscript.

[0014] The piece 4 of a ridge is inclining and forming, and the storm sewage which flows and falls the front face of the dry type outer wall material D is dropped with a sufficient water break on

the ground, without flowing backwards, and it is made for storm sewage not to infiltrate into the interior of a wall from an outer wall soffit. The piece 6 of makeup covers a foundation subordinate edge, and are fine sight nature and a thing which is easy to be settled and is finished.

[0015] By being inserted and filled up with the soffit of the vertical furring strip B, the insertion slot 7 can cover a part for the edge of the opening beta by the thickness of the vertical furring strip B, and can prevent a noxious insect, invasion of a mite, and the adverse current of storm sewage to Kabeuchi.

[0016] The breakthrough 8 prepared in the insertion slot 7 is for securing the path (aeration structure, air cycle) where the air shown by the arrow in drawing in a foundation portion flows, and establishing aeration structure, preventing a noxious insect and invasion of a mite by considering as a small bore hole at Kabeuchi.

[0017] Moreover, in drawing 3, the tongue-shaped piece 9 turned up, respectively is formed in the upper-limit section of the fixed piece 3, and the soffit section of the piece 6 of makeup, and it strives for safety by the metal edge, and improvement in fine sight nature and prevention of rusting.

[0018] Next, the dry type outer wall material D of the shape of horizontal placement which formed the male connection section 10 in the upper limit, and formed the female connection section 11 in the soffit with the long moldings of a tabular as shown, for example in drawing 4 as an example of the dry type outer wall material D is used. In addition, although the example of the metal siding material which sandwiched the core material 14 by facing 12 and the rear-face material 13 drawing was shown, in addition although it does not illustrate, the dry type outer wall material D, such as ceramic industry system siding material, a dry type tile, a hollow extrusion cement plate, and an ALC board, can be used.

[0019] Next, the outer wall structure of the foundation section which starts this invention through the example of construction is explained. First, in order to form the outer wall shown in drawing 1 and drawing 2, the fixed piece 3 of the ridge material C is fixed by the fasteners alpha, such as a nail, in accordance with a foundation 1, and the ridge material C is arranged so that the upper limit of Foundation E may be concealed by the piece 6 of makeup.

[0020] And the porous-waterproofing sheet F is arranged if needed. The soffit of the porous-waterproofing sheet F is formed on the fixed piece 3 of the ridge material C in that case. Furthermore, the vertical furring strip B is perpendicularly fixed to the main part A which consists of a main pillar 1 and a stud by the fasteners alpha, such as a nail, through the porous-waterproofing sheet F. In that case, it arranges so that the soffit of the vertical furring strip B may be inserted in the insertion slot 7 of the ridge material C.

[0021] Finally, while fitting the female connection section 11 of the dry type outer wall material D into the piece 5 of a start of the ridge material C, the male connection section 10 neighborhood is fixed to the vertical furring strip B through Fastener alpha, and the dry type outer wall material D of the 1st step is attached. And an outer wall is formed by carrying out male-and-female fitting of the dry type outer wall material D one by one toward a **** side from a foundation 1, carrying out horizontal placement and constructing.

[0022]

[Other Example(s)] Having explained above does not pass in the one example of the outer wall structure of the foundation section concerning this invention, but it can be made into the structure shown in drawing 5 - drawing 13, or can use each part material. That is, drawing 5 is the example which shows the structure at the time of the existing wall G existing between a main part A and the vertical furring strip B, and showed the structure at the time of carrying out wall repair by the new dry type outer wall material D from the existing wall G. In addition, as an existing wall G, a mortar wall, **** galvanized iron and sea cucumber galvanized iron, a wood slab, wood slab single ****, tc. are typical.

[0023] It is the example of the ridge material C which drawing 6 - drawing 11 show the modification of the ridge material C, drawing 7 sticks the insect control network 15 on the breakthrough 8 bottom with adhesives etc. separately, respectively, and drawing 6 unites it with it at the breakthrough 8 bottom, and can also shut out a vermin smaller than the size of a

breakthrough 8.

[0024] Drawing 8 is the example made into the ridge material C which can prevent the invasion of a vermin small [both] by arranging a breakthrough 8 with high density as a small bore hole, and making a breakthrough 8 into narrow ***** in drawing 9 .

[0025] While drawing 10 (a) – (d) and drawing 11 (a) – (d) is the cross section showing configuration deformation of the ridge material C, and drawing 10 (a) forms the lobe 16 which made the nose of cam of the piece 4 of a ridge project and improving a water break The example which formed the piece 17 of crookedness ***** in the inner direction for the nose of cam of the piece 6 of makeup, and improved fine sight nature and waterproofness, The example which drawing 10 (b) made the elasticity packing material 18 intervene in the insertion slot 7, and strengthened adhesion with the vertical furring strip B, and waterproofness, Drawing 10 (c) forms the piece 19 of support which extended the soffit of the fixed piece 3 below. The example and drawing 10 (d) which are stabilized and can perform installation to a foundation 1 are the example of the ridge material C which the elasticity packing material 18 was placed between the upper limits of the piece 5 of a start, improved adhesion with the female connection section 11 of the dry type outer wall material D, and improved waterproofness.

[0026] Drawing 11 (a) is the example of the ridge material C which formed the insertion slot 7 in the shape of [right-angled] a KO character, and the example which improved adhesion with the vertical furring strip B, the example which drawing 11 (b) made project the insertion slot 7 caudad, and drawing 11 (c) formed heights 20 in the insertion slot 7, and the example and drawing 11 (d) between which the insect control network 15 was made to be placed further carried out extrusion molding of the aluminium alloy, and was formed.

[0027] Drawing 12 (a) – (c) and drawing 13 (a) – (c) is explanatory drawing showing the example of others of the dry type outer wall material D, has the male connection section 10 and the female connection section 11 to ends, and shows the various examples of the siding material which sandwiched the core material 14 which consists of a synthetic-resin foam by facing 12 and the rear-face material 13 with a cross section. in addition, the thing which shows the example of the dry type outer wall material D with which the dry type outer wall material D shown in drawing 13 (c) filled up the sealant 21 in the female connection section 11, using vinyl chloride resin and polycarbonate resin as facing 21 — it is — the male connection section 10 — fixation of length grade of 5mm – 50mm — a hole — two or more 10a is formed at constant pitch (20mm – 100mm grade)

[0028]

[Effect of the Invention] According to the outer wall structure of the foundation section which starts this invention as explained above, a vermin and the invasion of a mite can be prevented to Kabeuchi, without checking the flow (aeration structure, air cycle) of ** air. ** Since ridge material is a long picture-like moldings, attachment construction can perform it easily. ** Ridge material begins to stretch dry type outer wall material, and can use also as TATO material. There are the feature of ** and an effect.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] the example of representation of the outer wall structure of the foundation section concerning this invention is shown — it is a notching perspective diagram in part

[Drawing 2] It is the cross section showing the example of representation of the outer wall structure of the foundation section concerning this invention.

[Drawing 3] the example of the ridge material used by drawing 1 is shown — it is a notching perspective diagram in part

[Drawing 4] the example of the dry type outer wall material used by drawing 1 is shown — it is a notching perspective diagram in part

[Drawing 5] It is the cross section showing the example of others of the outer wall structure of the foundation section concerning this invention.

[Drawing 6] It is explanatory drawing showing the example of others of ridge material.

[Drawing 7] It is explanatory drawing showing the example of others of ridge material.

[Drawing 8] It is explanatory drawing showing the example of others of ridge material.

[Drawing 9] It is explanatory drawing showing the example of others of ridge material.

[Drawing 10] It is explanatory drawing showing the example of others of ridge material.

[Drawing 11] It is explanatory drawing showing the example of others of ridge material.

[Drawing 12] It is the cross section showing the example of others of dry type outer wall material.

[Drawing 13] It is the cross section showing the example of others of dry type outer wall material.

[Description of Notations]

alpha Fastener

beta Opening

A Main part

B Vertical furring strip

C Ridge material

D Dry type outer wall material

E Foundation

F Porous-waterproofing sheet

G Existing wall

1 Foundation

2 Main Pillar

3 Fixed Piece

4 Piece of Ridge

5 Piece of Start

6 Piece of Makeup

7 Insertion Slot

8 Breakthrough

9 Tongue-shaped Piece

10 Male Connection Section

- 10a fixation — a hole
- 11 Female Connection Section
- 12 Facing
- 13 Rear-Face Material
- 14 Core Material
- 15 Insect Control Network
- 16 Lobe
- 17 Piece of Incurvation
- 18 Elasticity Packing Material
- 19 Piece of Support
- 20 Heights
- 21 Sealant

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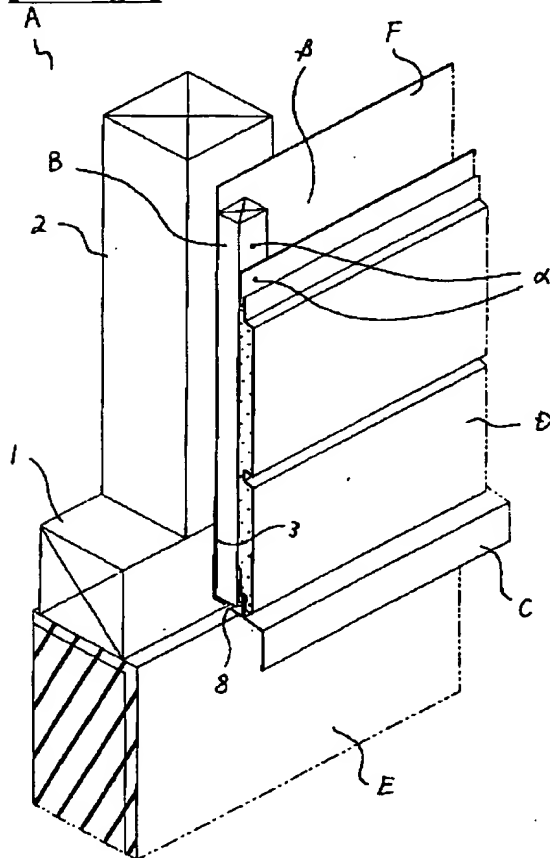
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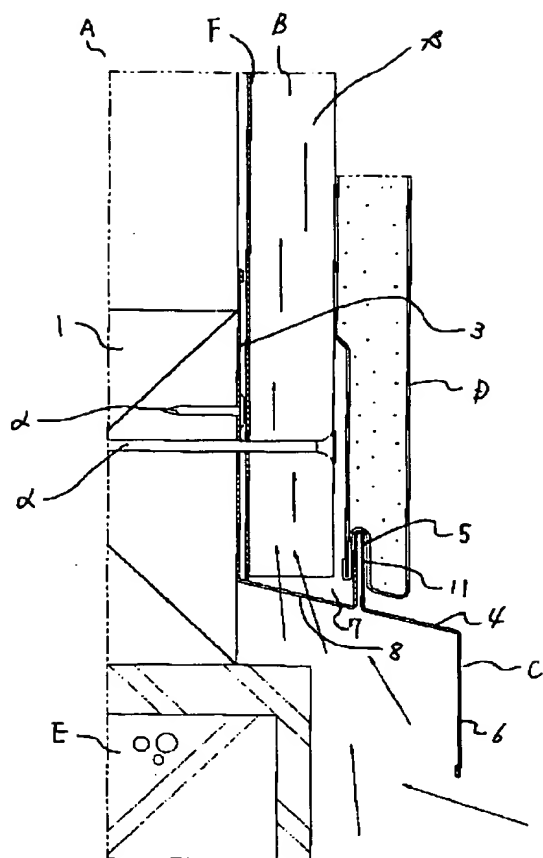
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DRAWINGS

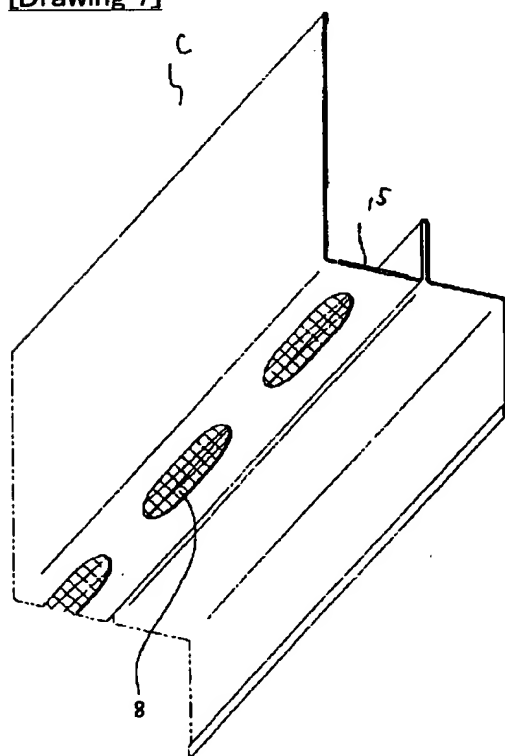
[Drawing 1]



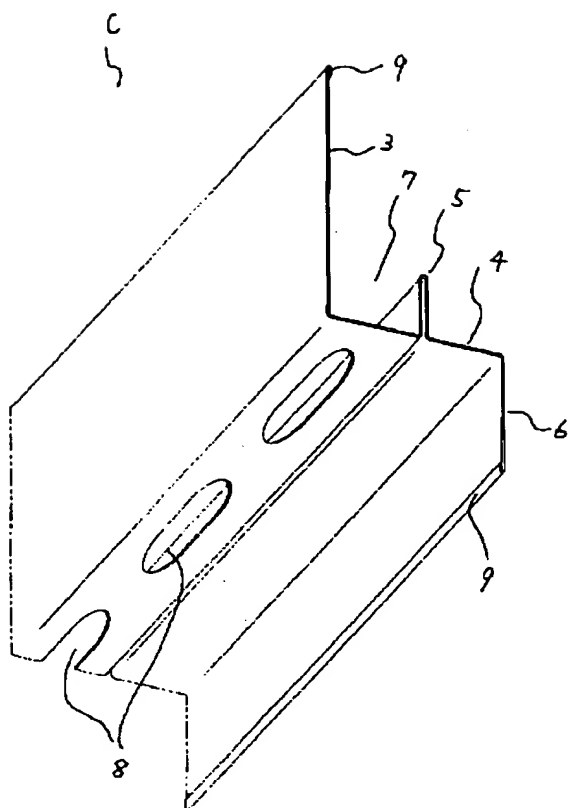
[Drawing 2]



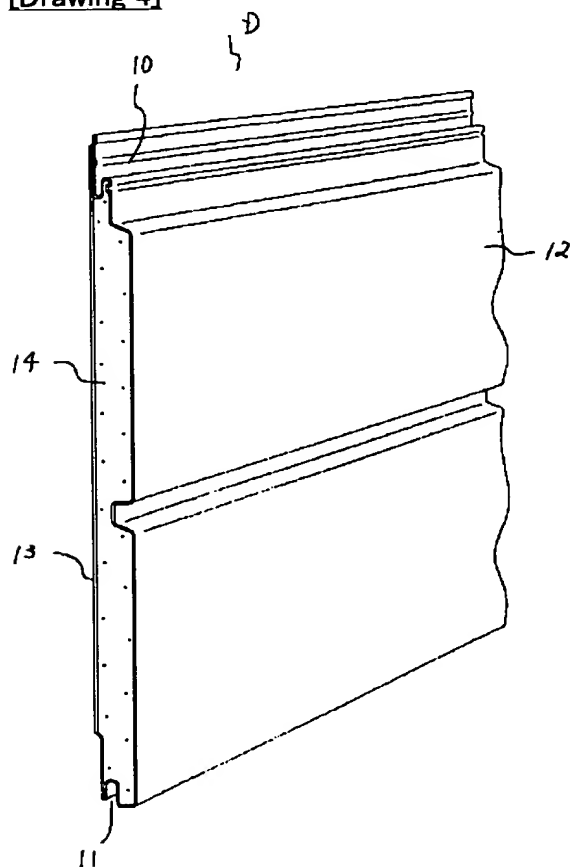
[Drawing 7]



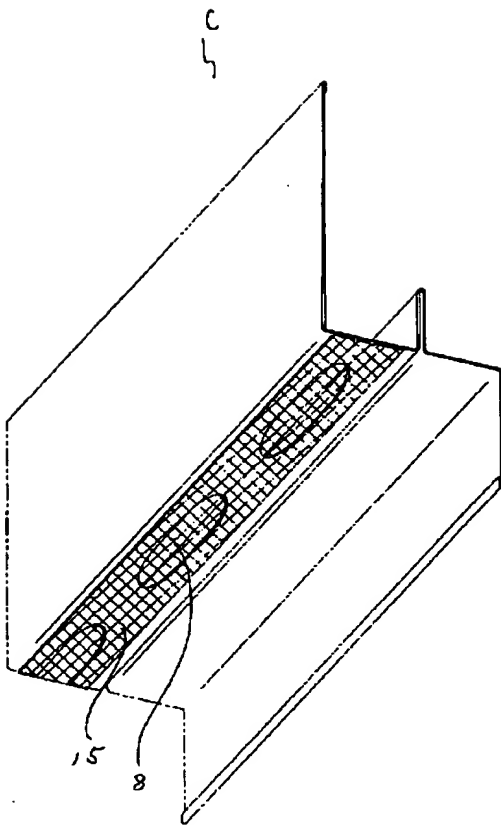
[Drawing 3]



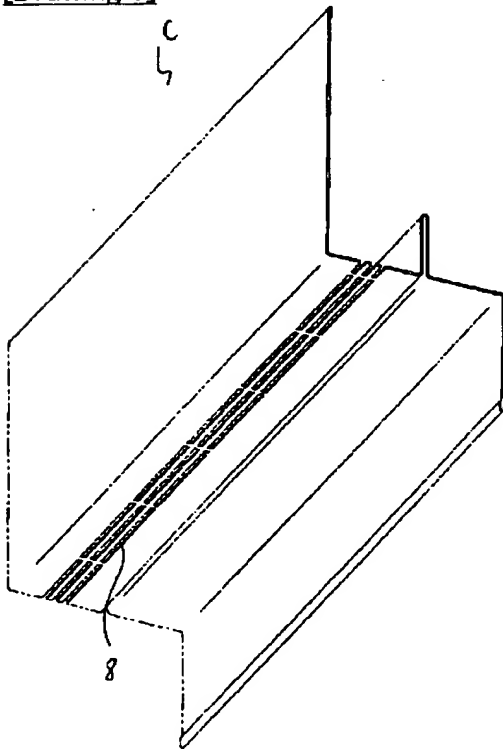
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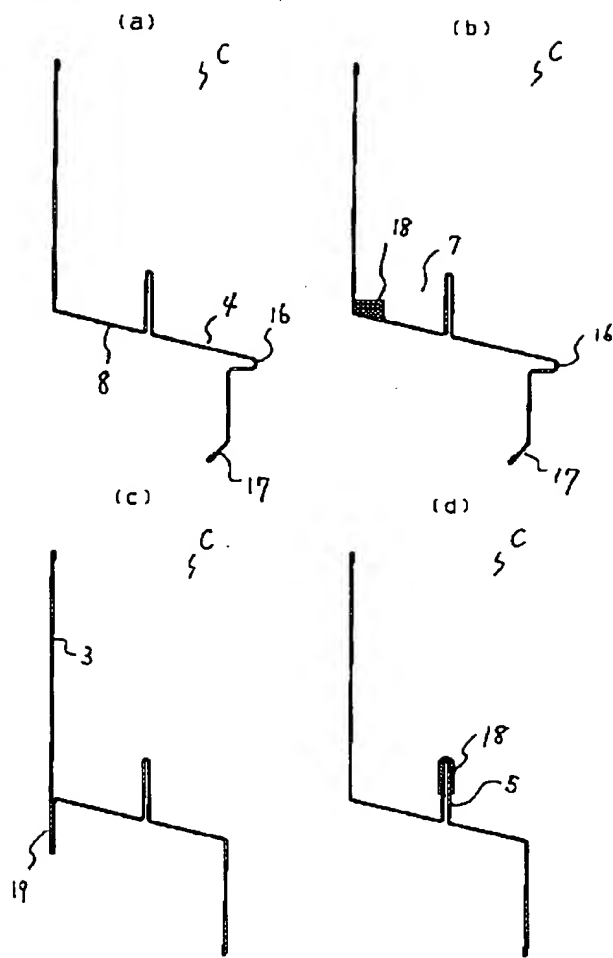
[Drawing 8]



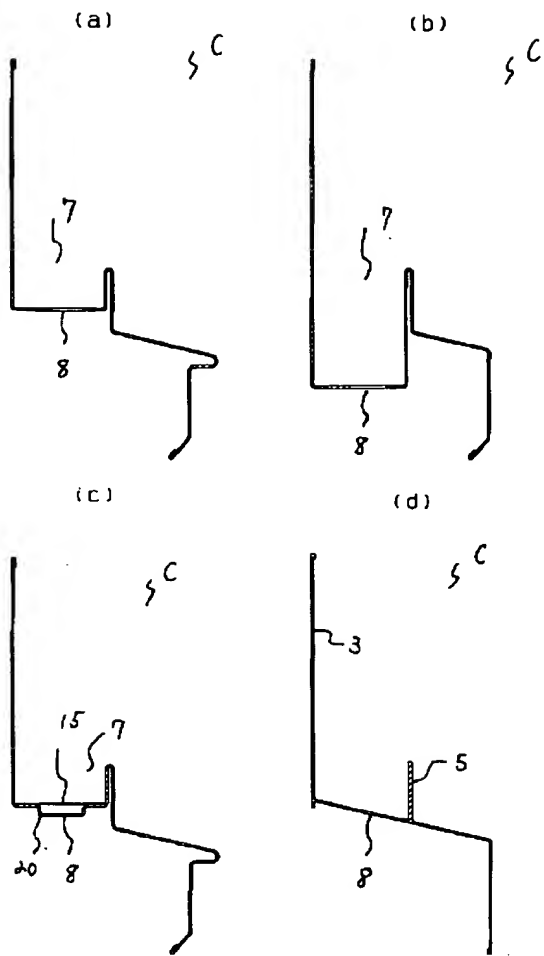
[Drawing 9]



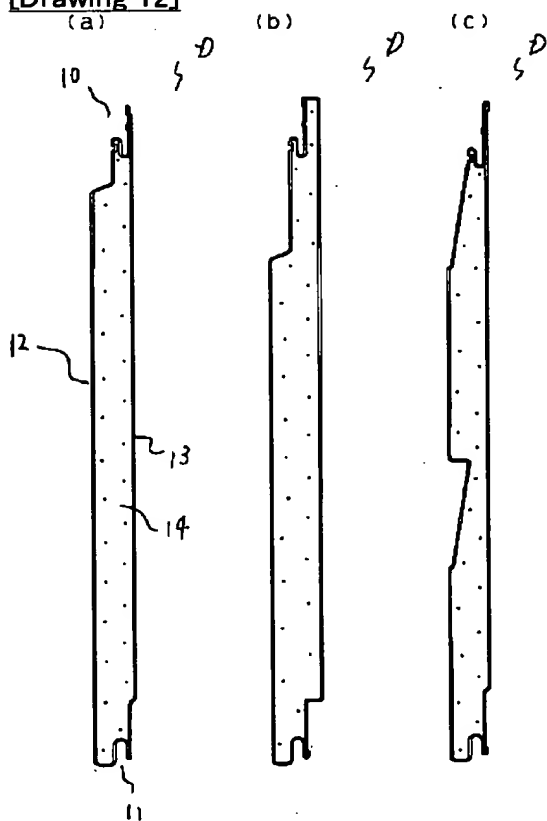
[Drawing 10]



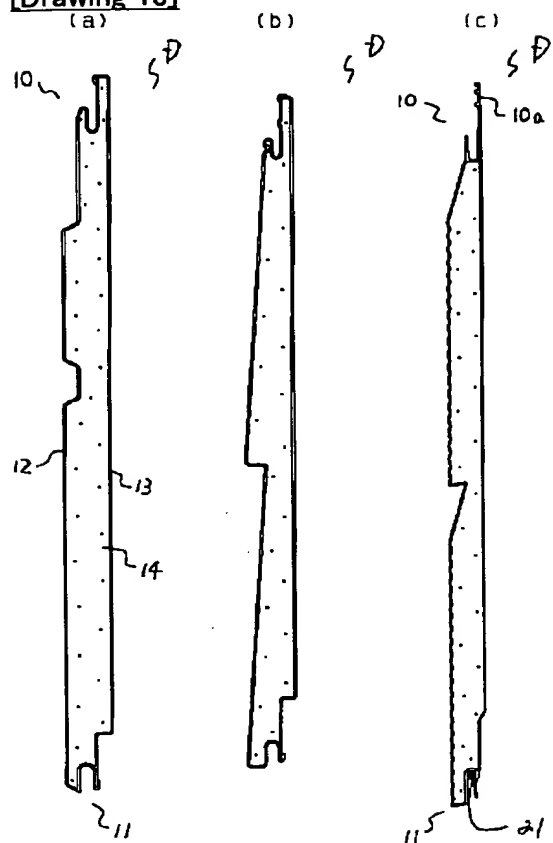
[Drawing 11]



[Drawing 12]



[Drawing 13]



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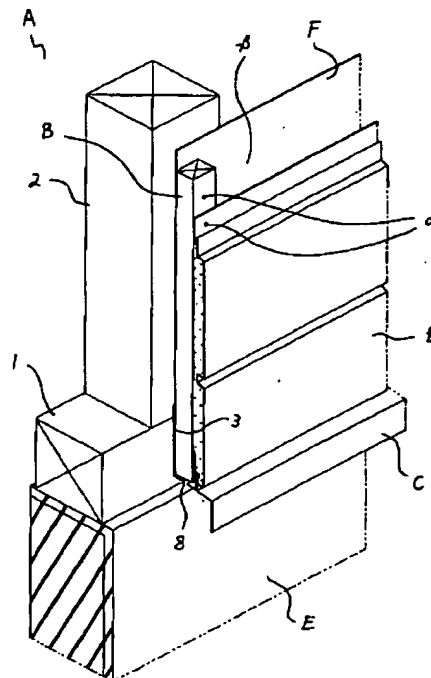
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(54) 【発明の名称】 土台部の外壁構造

(57) 【要約】

【目的】 新築あるいは改修における躯体を下地とし、これに通気工法、防虫機能を付加した外壁を形成するための土台部の外壁構造とすることである。

【構成】 縦胴縁Bの厚みにより形成される土台1と乾式外壁材Dとの間の空隙βを、土台1部分において水切り材Cの挿入溝7にて被覆すると共に、挿入溝7に複数の貫通孔8を設けることにより、空気の流れ（通気構造、エアサイクル）を阻害せずに、壁内に害虫や、小動物の侵入を防止することができ、しかも、水切り材Cは成形物なので取付施工が簡単に行うことができる土台部の外壁構造である。



【特許請求の範囲】

【請求項1】 主柱、間柱に対応してほぼ垂直に縦胴縁が固定され、該縦胴縁に雄雌連結構造の乾式外壁材が固定されている土台部の外壁構造において、略断面を垂直な固定片と該固定片の下端を外方に傾斜して突出させた水切り片と、該水切り片の途中を上方に突出させたスタート片と、前記水切り片の先端を下方に垂下させた化粧片を形成し、かつ、前記固定片とスタート片とでコ字状の挿入溝を形成すると共に、該挿入溝に貫通孔を複数形成した長尺状の水切り材を備え、水切り材の固定片が土台に沿って配設固定され、水切り材の挿入溝に縦胴縁の下端部が挿入されていると共に、水切り材のスタート片に乾式外壁材の雌型連結部が嵌合されて、外壁が形成されていることを特徴とする土台部の外壁構造。

【発明の詳細な説明】

【0001】

【産業上の利用分野】 本発明は新築あるいは改修における躯体を下地とし、これに通気構造、防虫機能を付加した外壁を形成するための土台部の外壁構造に関するものである。

【0002】

【従来の技術】 従来、乾式外壁材を用いて通気構造に形成した外壁は、主柱、間柱等からなる躯体上に通気性の防水シートを全面に敷設し、この防水シート上もしくは防水シート上に配設した縦胴縁上に外壁材をただ単に固定した構造であった。さらに、既存壁上に新規壁を形成する従来の改修壁においても、新築の際と同様に既存壁上に縦胴縁を配設し、この縦胴縁上に外壁材をただ単に固定した構造であった。

【0003】

【発明が解決しようとする課題】 しかしながらこの種の構造では、躯体、もしくは既存外壁と乾式外壁材との間に縦胴縁の厚みによる空隙が形成されると共に、乾式外壁材の下端部分（土台部分）ではこの空隙の開口が形成されることになり、この開口部から壁内部に蜂や白蟻、ゴキブリ、蛾のような害虫や、ネズミ等の小動物が侵入し、躯体や外壁材に損傷を与え、しいては居住環境が悪化し衛生上好ましいものではなかった。

【0004】

【課題を解決するための手段】 本発明はこのような問題点に鑑み、縦胴縁の厚みにより形成される土台と乾式外壁材との間の空隙を、土台部分において水切り材の挿入溝にて被覆すると共に、挿入溝に複数の底片孔を設けることにより、空気の流れ（通気構造、エアサイクル）を阻害せずに、壁内に害虫や、小動物の侵入を防止することができ、しかも、水切り材は成形物なので取付施工が簡単に行うことができる土台部の外壁構造を提案するのである。

【0005】

【実施例】 以下に図面を用いて本発明に土台部の外壁構

造について詳細に説明する。図1は上記構造を説明する斜視図、図2は断面図であり、図においてAは躯体、Bは縦胴縁、Cは水切り材、Dは乾式外壁材、Eは基礎、Fは通気性防水シートである。

【0006】 躯体Aは例えば新築の構造であれば図に示すように、基礎E上に水平に配設した土台1と、土台1上に垂直に配設した主柱2と、各主柱2間に垂直に配設した間柱（図示せず）等からなる一般的な物である。勿論、図に示したこれらは、躯体Aが木造下地からなる場合を図示したものであり、鉄骨下地からなる建築物の際は、H型钢材や角型钢材、もしくはリップ溝型钢材等からなるものである。また、図示しないが内壁材、主柱2、間柱、通気性防水シートFにより囲まれた空間に断熱材（グラスウール、ロックウール、合成樹脂発泡体、現場発泡合成樹脂発泡体、等）を形成しても良いものである。この場合には、空間全部に形成したり、空間を残して屋内側、あるいは屋外側に形成するものである。

【0007】 縦胴縁Bは垂直方向に配設した主柱2および間柱上に対応して、下端部は後記する水切り材Cの固定片3上に配設すると共に、垂直方向に土台1部分から軒天部分まで釘等の固定具αにより、通気性防水シートFを介して配設固定するものである。縦胴縁Bは主に後記する乾式外壁材Dの取り付け部材として機能すると共に、その厚みにより、躯体Aおよび通気性防水シートFと乾式外壁材Eとの間に空隙βを形成させ、空気の流通経路として機能するものである。

【0008】 特に土台1部分における縦胴縁Bの取り付けは図に示すように、土台1に配設された水切り材Cの挿入溝7の最奥まで縦胴縁Bの下端が存在する位置までとするものである。

【0009】 また、一般的には図に示すように、躯体Aと縦胴縁Bとの間に通気性防水シートFを敷設するものである。通気性防水シートFはアスファルトフェルト等の防水紙の他、通気性防水紙等からなり、水分の出入りを防止し、結露の防止、湿気の調節（屋内の湿気を屋外に放出する等）をおこない、躯体Aを保護する働きがある。

【0010】 水切り材Cは例えば図3に示すように、略断面を垂直な固定片3と固定片3の下端を外方に傾斜して突出させた水切り片4と、水切り片4の途中を上方に突出させたスタート片5と、水切り片4の先端を下方に垂下させた化粧片6を形成し、かつ、固定片3とスタート片5とでコ字状の挿入溝7を形成すると共に、挿入溝7の奥部（水切り片4）に貫通孔8を複数形成した長尺状体からなるものである。

【0011】 また、水切り材Cは、図1、図2に示すように、土台1と平行に水平方向に連続して、その固定片3を土台1に、釘等の固定具αを介して固定するものである。さらに、水切り材Cは縦胴縁Bを配置するガイドとして、また後記する乾式外壁材Dの配設のガイドとし

て機能するものであり、乾式外壁材Dの表面を流れ落ちる雨水等を水切れよく地面に落下させ、雨水が外壁下端より壁内部に浸入しないようにするものである。

【0012】さらに、水切り材Cの素材としては、金属薄板、例えば鉄、アルミニウム、銅、ステンレス、チタン、アルミ・亜鉛合金メッキ鋼板、ガルバリウム鋼板、ホーロー鋼板、クラッド鋼板、ラミネート鋼板（塩ビ鋼板等）、サンドイッチ鋼板（制振鋼板等）、および塩化ビニル樹脂、ポリカーボネイト樹脂等（勿論、これらを各種色調に塗装したカラー板を含む）の一種をロール成形、プレス成形、押出成形等によって所定形状に成形したもの、あるいは無機質材を押出成形、プレス成形、オートクレーブ養生成形等したものである。

【0013】また、水切り材Cについて図2を用いてさらに詳説すると、固定片3は水切り材Cを土台1に固定具αを介して固定する部分である。スタート片5は、後記する乾式外壁材Dの雌型連結部11を嵌合する部分であり、乾式外壁材Dの張り始めのガイド兼スタート材として機能すると共に、乾式外壁材Dの表面を流れ落ちてきた雨水等が土台1方向に浸入しないように逆流を防止するものである。

【0014】水切り片4は傾斜して形成することで、乾式外壁材Dの表面を流れ落ちる雨水等を、逆流することなく、水切れよく地面に落下させ、雨水が外壁下端より壁内部に浸入しないようにするものである。化粧片6は土台部下端を覆い、美観性、納まり良く仕上げるものである。

【0015】挿入溝7は縦胴縁Bの下端を挿入し充填することにより、縦胴縁Bの厚みによる空隙βの端部分を覆い、壁内に害虫や、小動物の侵入、雨水の逆流を防止することができるものである。

【0016】挿入溝7に設けた貫通孔8は小径孔とすることにより、壁内に害虫や、小動物の侵入を防止しつつ、土台部分において図中の矢印で示す空気の流れる通路（通気構造、エアサイクル）を確保し、通気構造を確立するためのものである。

【0017】また、図3では固定片3の上端部と化粧片6の下端部に、それぞれ折り返した舌片9を形成し、金属端による危険防止と美観性の向上、発錆の防止に努めたものである。

【0018】次に、乾式外壁材Dの例としては、例えば図4に示すような、板状の長尺成形物で上端に雄型連結部10、下端に雌型連結部11を形成した横張り状の乾式外壁材Dを用いるものである。なお、図では表面材12と裏面材13とで芯材14をサンドイッチした金属サイディング材の例を示したが、このほかにも図示しないが窯業系サイディング材や乾式タイル、中空押出セメント板、ALC板等の乾式外壁材Dを用いることができる。

【0019】次に、施工例を通して本発明に係る土台部

の外壁構造について説明する。まず、図1、図2に示す外壁を形成するには、まず、水切り材Cの固定片3を土台1に沿って釘等の固定具αにて固定し、化粧片6にて基礎Eの上端を隠蔽するように水切り材Cを配設する。

【0020】そして、必要に応じて通気性防水シートFを配設する。その際、通気性防水シートFの下端は水切り材Cの固定片3上に形成するようにする。さらに、主柱1、間柱からなる躯体Aに縦胴縁Bを垂直に、かつ通気性防水シートFを介して釘等の固定具αにて固定する。その際、縦胴縁Bの下端を水切り材Cの挿入溝7に挿入するように配設する。

【0021】最後に、乾式外壁材Dの雌型連結部11を水切り材Cのスタート片5に嵌合すると共に、雄型連結部10付近を縦胴縁Bに固定具αを介して固定し、第1段目の乾式外壁材Dを取り付ける。そして、乾式外壁材Dを土台1から軒天側に向かって順次雄雌嵌合し、横張りして施工することにより外壁を形成するものである。

【0022】

【その他の実施例】以上説明したのは本発明に係る土台部の外壁構造の一実施例にすぎず、図5～図13に示す構造としたり、各部材を用いることができる。すなわち、図5は躯体Aと縦胴縁Bとの間に既存壁Gが存在する際の構造を示すものであり、既存壁G上から新規の乾式外壁材Dにて壁改修する際の構造を示した例である。なお、既存壁Gとしては、モルタル壁、角波トタンやなまこトタン、木板、木板シングル葺き、等が代表的である。

【0023】図6～図11は水切り材Cの変形例を示すものであり、図6は貫通孔8の下側に、図7は貫通孔8の上側にそれぞれ、防虫ネット15を別途接着剤等で貼着して一体化したものであり、貫通孔8の大きさより小さな害虫をもシャットアウトできる水切り材Cの例である。

【0024】図8は貫通孔8を小径孔として高密度に配設し、図9では貫通孔8を幅狭の溝状孔とすることにより、共に小さな害虫の侵入を防止できる水切り材Cとした例である。

【0025】図10(a)～(d)、図11(a)～(d)は水切り材Cの形状変形を示す断面図であり、図10(a)は水切り片4の先端を突出させた突出部16を形成し、水切れを良くすると共に、化粧片6の先端を内方に屈曲した屈曲片17を形成して美観性と防水性を向上した例、図10(b)は挿入溝7内に軟質パッキング材18を介在させ、縦胴縁Bとの密着性と防水性を強化した例、図10(c)は固定片3の下端を下方に延長した支持片19を形成し、土台1への取り付けを安定して行える例、図10(d)はスタート片5の上端に軟質パッキング材18を介在し、乾式外壁材Dの雌型連結部11との密着性を良くし、防水性を向上した水切り材Cの例である。

【0026】図11(a)は挿入溝7を直角のコ字状に形成し、縦胴縁Bとの密着性を良くした例、図11

(b)は挿入溝7を下方に突出させた例、図11(c)は挿入溝7に凸部20を形成し、さらに防虫ネット15を介在させた例、図11(d)はアルミニウム合金を押出成形して形成した水切り材Cの例である。

【0027】図12(a)～(c)、図13(a)～(c)は乾式外壁材Dのその他の例を示す説明図であり、両端に雄型連結部10と雌型連結部11を有し、表面材12と裏面材13とで合成樹脂発泡体からなる芯材14をサンドイッチしたサイディング材の種々の例を断面図にて示したものである。なお、図13(c)に示す乾式外壁材Dは表面材21として塩化ビニル樹脂やポリカーボネイト樹脂を用い、雌型連結部11内にシール材21を充填した乾式外壁材Dの例を示すものであり、雄型連結部10には長さ5mm～50mm位の固定孔10aを一定ピッチ(20mm～100mm位)で複数個形成したものである。

【0028】

【発明の効果】以上説明したように本発明に係る土台部の外壁構造によれば、①空気の流れ(通気構造、エアサイクル)を阻害せずに、壁内に害虫や、小動物の侵入を防止することができる。②水切り材は長尺状成形物なので取付施工が簡単に行うことができる。③水切り材が乾式外壁材を張り始めるスタート材としても利用できる。等の特徴、効果がある。

【図面の簡単な説明】

【図1】本発明に係る土台部の外壁構造の代表例を示す一部切り欠き斜視図である。

【図2】本発明に係る土台部の外壁構造の代表例を示す断面図である。

【図3】図1で用いられた水切り材の例を示す一部切り欠き斜視図である。

【図4】図1で用いられた乾式外壁材の例を示す一部切り欠き斜視図である。

【図5】本発明に係る土台部の外壁構造のその他の例を示す断面図である。

【図6】水切り材のその他の例を示す説明図である。

【図7】水切り材のその他の例を示す説明図である。

【図8】水切り材のその他の例を示す説明図である。

【図9】水切り材のその他の例を示す説明図である。

【図10】水切り材のその他の例を示す説明図である。

【図11】水切り材のその他の例を示す説明図である。

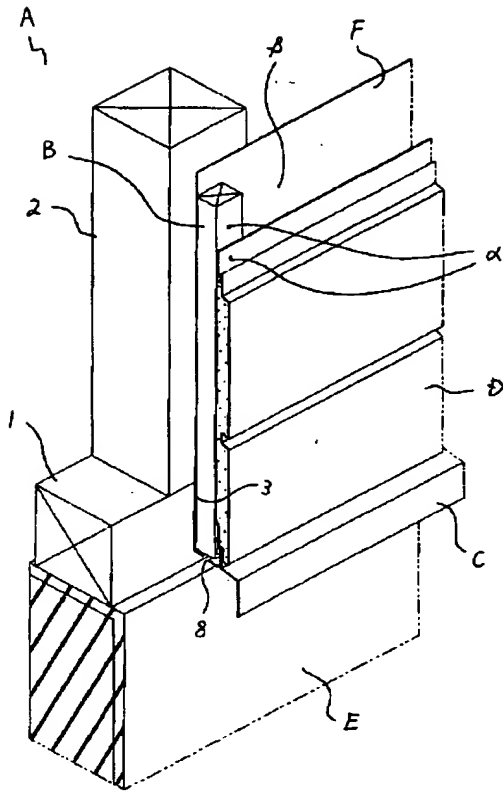
【図12】乾式外壁材のその他の例を示す断面図である。

【図13】乾式外壁材のその他の例を示す断面図である。

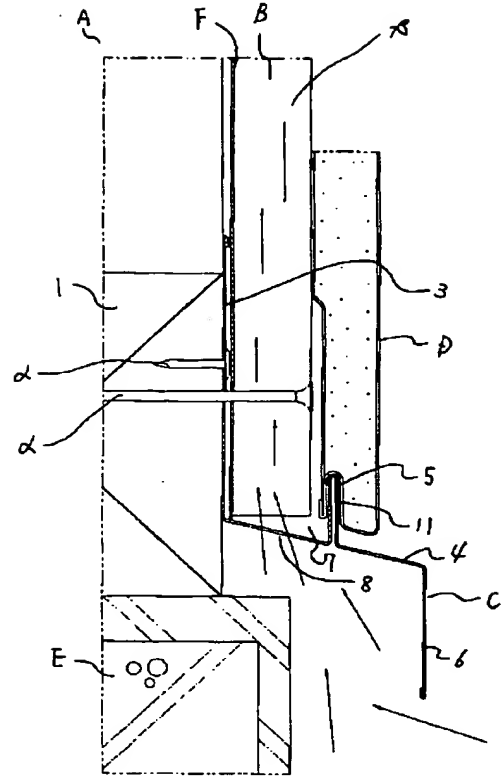
【符号の説明】

- α 固定具
- β 空隙
- A 躯体
- B 縦胴縁
- C 水切り材
- D 乾式外壁材
- E 基礎
- F 通気性防水シート
- G 既存壁
- 1 土台
- 2 主柱
- 3 固定片
- 4 水切り片
- 5 スタート片
- 6 化粧片
- 7 挿入溝
- 8 貫通孔
- 9 舌片
- 10 雄型連結部
- 10a 固定孔
- 11 雌型連結部
- 12 表面材
- 13 裏面材
- 14 芯材
- 15 防虫ネット
- 16 突出部
- 17 屈曲片
- 18 軟質パッキング材
- 19 支持片
- 20 凸部
- 21 シール材

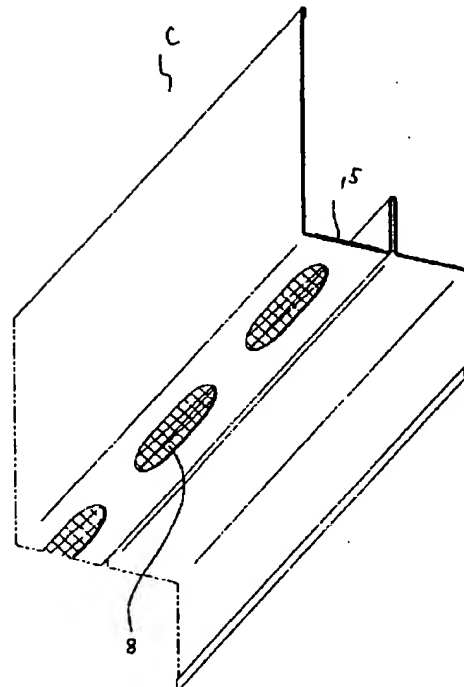
【図1】



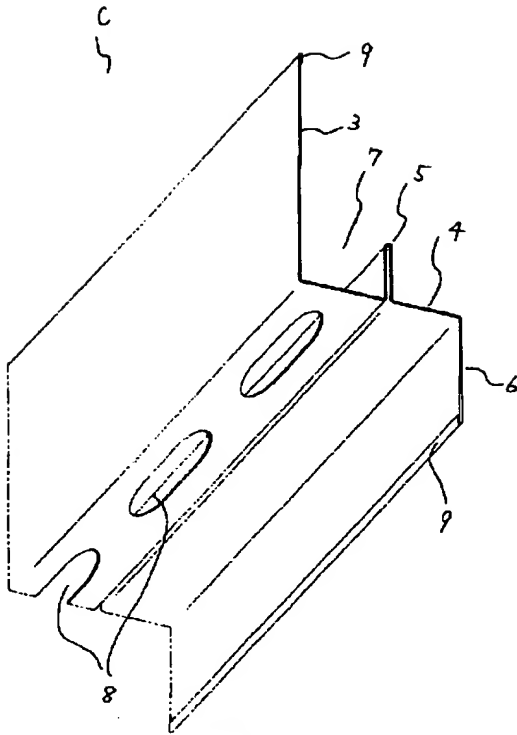
【図2】



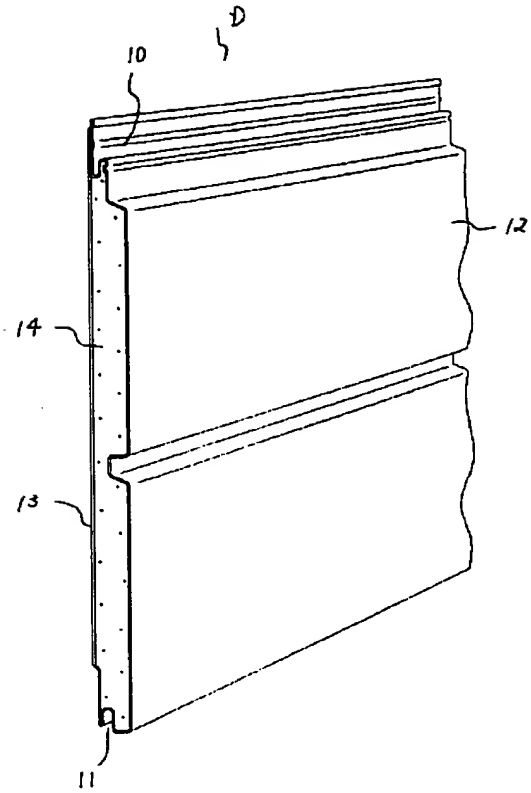
【図7】



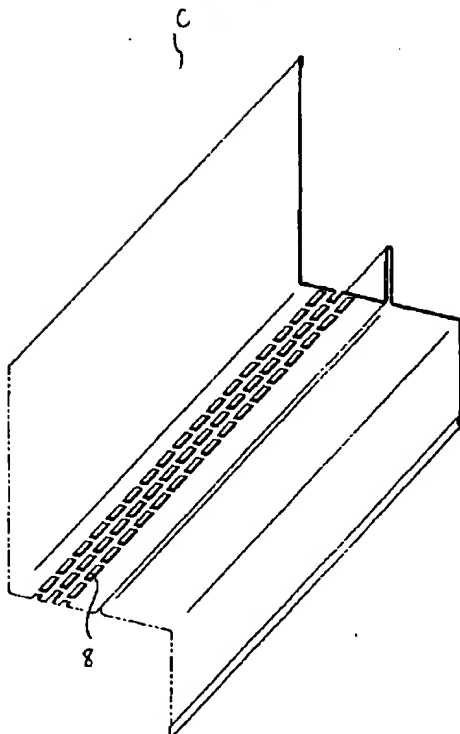
【図3】



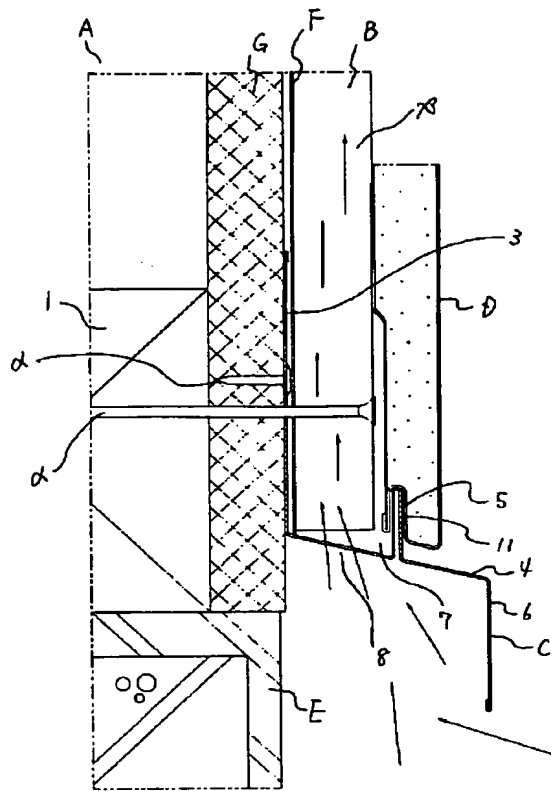
【図4】



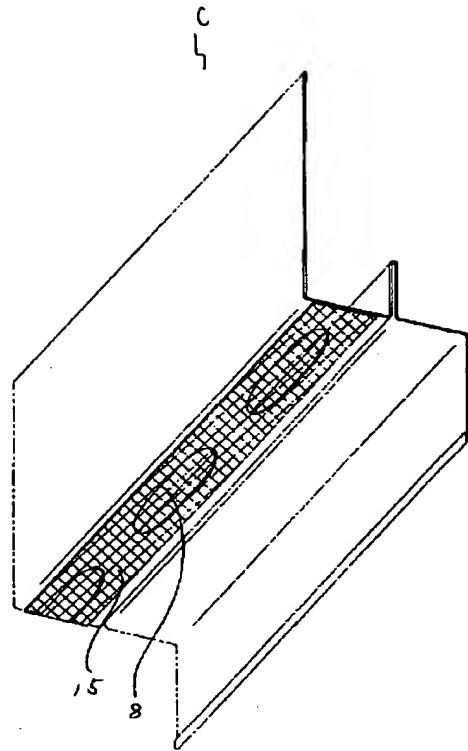
【図8】



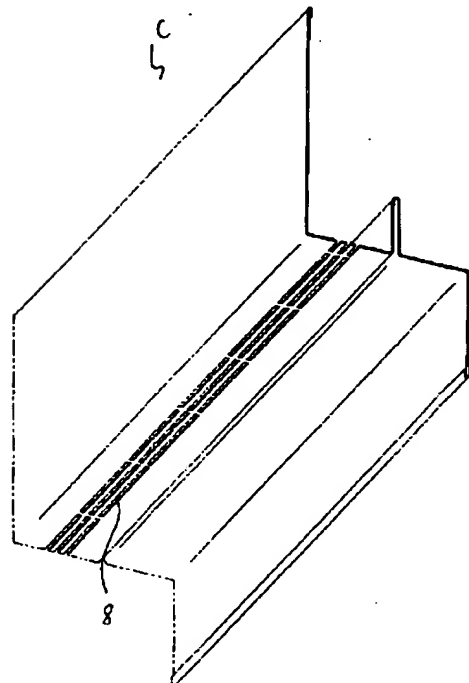
【図5】



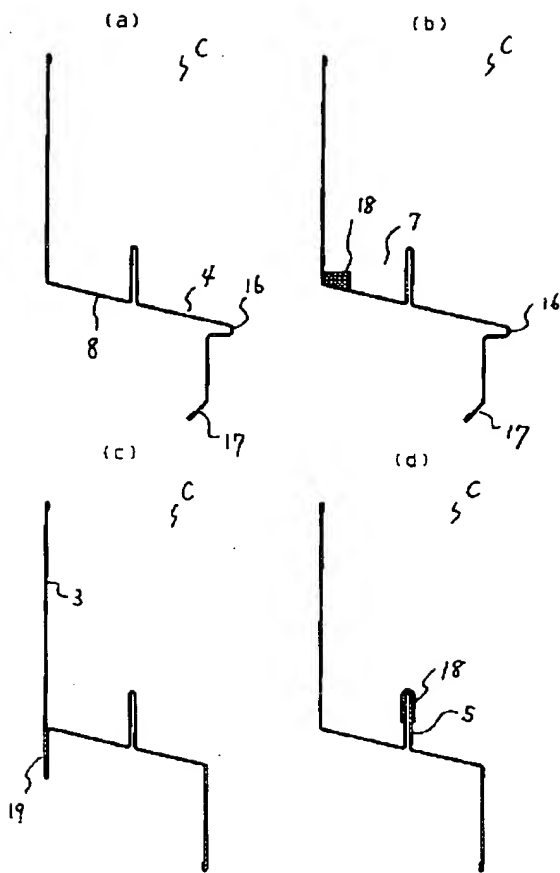
【図6】



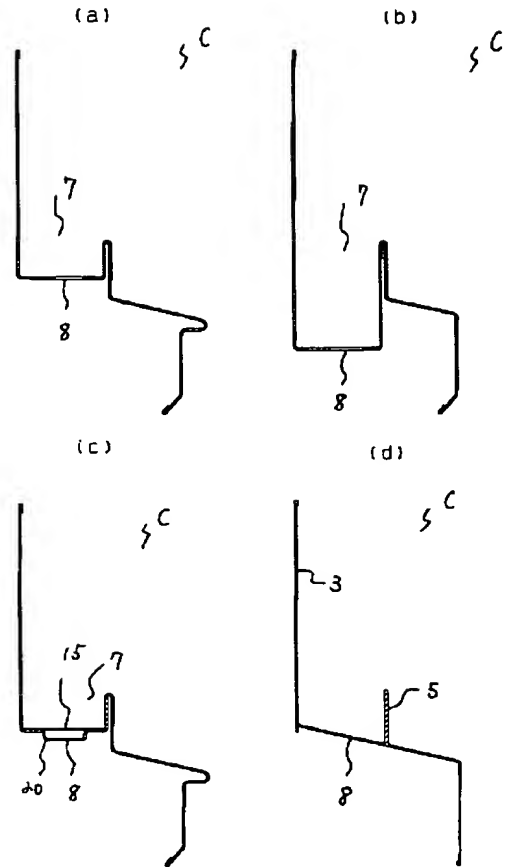
【図9】



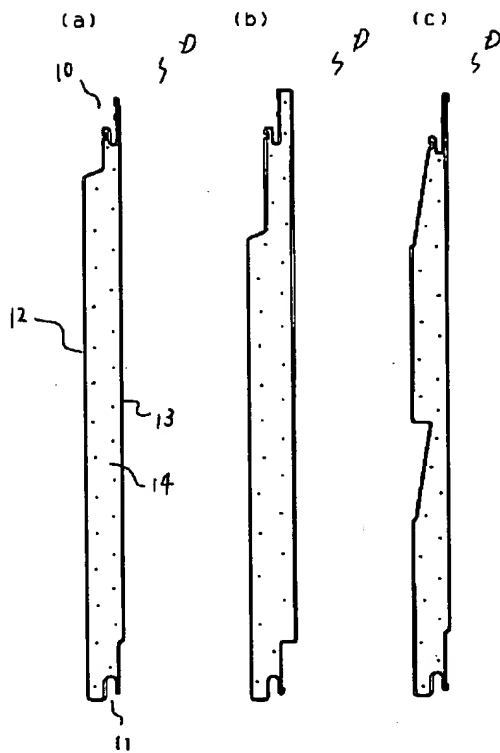
【図10】



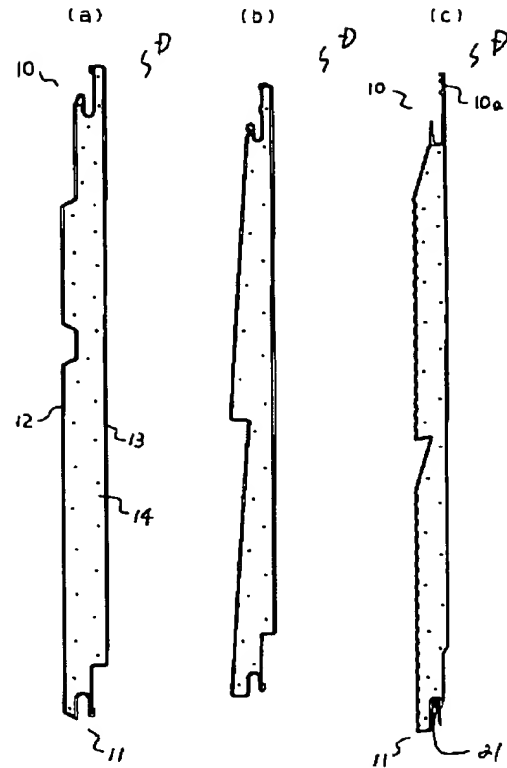
【図11】



【図12】



【図13】



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